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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows:

- (Currently Amended) A portable electronic device comprising containing an 1 electrochemical cell, said cell comprising having a positive electrode, a negative electrode and an electrolyte, eharacterised in that at least the wherein said positive electrode comprises a mesoporous structure having a periodic arrangement of substantially uniformly sized pores [of] with a cross-section [of] in the order of $10^{-[8]9}$ to $10^{-[9]8}$ m.
- 2.. (Currently Amended) A portable electronic device according to any preceding claim 1, wherein the mesoporous structure of the positive electrode is formed of a material selected from a metal, a metal oxide, a metal hydroxide or a combination thereof of any two or more of these.
- (Currently Amended) A portable electronic device according to any preceding claim 3. 1, wherein the mesoporous structure of the positive electrode comprises a metal [and], a metal oxide [or], a metal hydroxide or a metal oxy-hydroxide, said metal oxide [or], metal hydroxide or metal oxy-hydroxide, forming a surface layer over said metal and extending over at least the pore surfaces.
- (Currently Amended) A portable electronic device according to any preceding claim 4. 1, wherein the mesoporous structure of the positive electrode comprises a metal that is selected from: nickel[;] or nickel alloys of nickel, including alloys with a transition metal, nickel/cobalt alloys, [and] iron/nickel alloys[;], cobalt[;], platinum[;], palladium[; and] or ruthenium.
- (Currently Amended) A portable electronic device according to any preceding claim 5.. 1, wherein said [the] mesoporous structure comprising of the positive electrode comprises a metal oxide, hydroxide or oxy-hydroxide is selected-from: gold oxide; palladium oxide; nickel oxide (NiO); nickel hydroxide (Ni(OH)2), nickel oxy-hydroxide (NiOOH) [and] or ruthenium oxide.

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- 6. (Currently Amended) A portable electronic device according to any preceding claim 1, wherein the mesoporous structure has a pore diameter [within] in the range [from] of about 1 to 10 nm, preferably from 2.0 to 8.0 nm.
- 7. (Currently Amended) A portable electronic device according to any preceding claim 1, wherein the mesoporous structure has a pore number density of [from] about $4x10^{11}$ to 3×10^{13} pores per cm². preferably from 1×10^{12} to 1×10^{13} pores per cm².
- (Currently Amended) A portable electronic device according to any preceding claim 8.. 1, wherein at least 85 % of the pores in [the] said mesoporous structure have pore diameters [to] within 30 %, preferably within 10 %, more preferably within 5 %, of the average pore diameter...
- 9. (Currently Amended) A portable electronic device according to any preceding claim 1, wherein the mesoporous structure has a hexagonal arrangement of pores that are continuous through the thickness of the electrode.
- (Currently Amended) A portable electronic device according to claim 9, wherein the 10. hexagonal arrangement of pores has a pore periodicity [of] in the range [from] of 5 to 9 nm.
- 11. (Currently Amended) A portable electronic device according to any preceding claim 1, wherein the negative electrode comprises a mesoporous structure having a periodic arrangement of substantially uniformly sized pores [of] with a cross-section [of] in the order of 10-[8]9 to 10-[9]8 m.
- 12.. (Currently Amended) [A] The portable electronic device according to any preceding of claim 1, wherein [the] said mesoporous structure is a film having a thickness in the range [from] of about 0.5 to about 5 micrometers.
- 13. (Currently Amended) [A] The portable electronic device according to any preceding of claim 1, wherein [the] said negative electrode comprises a material selected from: that is carbon[;], cadmium[;], iron[;], a palladium/nickel alloy[;], an iron/titanium alloy[;], palladium[;], and the mixed metal hydride or LaNi₅H_x.

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14. (Currently Amended) [A] <u>The</u> portable electronic device according to any preceding of claim 1, wherein [the] said negative electrode comprises a material selected from: that is carbon [and] or palladium.

- 15. (Currently Amended) [A] <u>The</u> portable electronic device according to any preceding of claim 1, wherein [the] said mesoporous structure of the positive electrode comprises nickel and [an] a nickel oxide, a nickel hydroxide or a nickel oxy-hydroxide of nickel selected from that is NiO, Ni(OH)2 and NiOOH, said nickel oxide, [or] nickel hydroxide, or nickel oxyhydroxide forming a surface layer over said nickel and extending over at least the pore surfaces, and [the] wherein said negative electrode has a mesoporous structure comprised of carbon or palladium.
- 16.. (Currently Amended) [A] The portable electronic device according to any preceding of claim 15, wherein the mesoporous structure of the positive electrode comprises nickel and an oxide, hydroxide or oxy-hydroxide of nickel selected from NiO, Ni(OH)2 and NiOOH, said nickel oxide or hydroxide forming a surface layer over said nickel and extending over at least the pore surfaces, and the said negative electrode comprises nanoparticulate carbon.
- 17. (Currently Amended) [A] The portable electronic device according to any preceding of claim 1, wherein [the] said cell is constructed to function as a battery, as a supercapacitor or [as] a combined battery/supercapacitor combination thereof.
- 18. (New) A portable electronic device according to claim 6, wherein the mesoporous structure has a pore diameter in the range of about 2.0-8.0 nm.
- 19. (New) A portable electronic device according to claim 7, wherein the mesoporous structure has a pore number density of 1x10¹² to 1x10¹³ pores per cm²
- 20. (New) The portable electronic device of claim 8, wherein at least 85 % of the pores in said mesoporous structure have pore diameters to within 10 % of the average pore diameter.
- 21 (New) The portable electronic device of claim 8, wherein at least 85 % of the pores in said mesoporous structure have pore diameters to within 5 % of the average pore diameter.

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(New) The portable electronic device of claim 4, wherein said Nickel alloys are alloys 22 with a transition metal, nickel/cobalt alloys, iron/nickel alloys, cobalt, platinum, palladium or ruthenium.